WHIRRAKEE

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MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

WHIRRAKEE, VOL. 5 No. 8 SEPTEMBER I984

Monthly newsletter of the Bendigo Field Naturalists Club.
Whirrakee takes its name from the Whirrakee Wattle (Acacia williamsonii) which is virtually endemic to the Bendigo Region.

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COVER PHOTO Short-nosed Bandicoot, Isoodon obselus. Photo by Bill Holsworth, See article on Bandicoots pp. 3-6.

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(Typed contributions are preferred, but if this is not possible, then please make every effort to use neat, legible writing or printing.) Articles from Whirrakee may be reproduced, but permission should be sought from the Bendigo Field Naturalists Club, and acknowledgement given to the author and the club.

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- EDITOR'S PAGE

This issue of Whirrakee has been sent out a week early to give members adequate time to consider and return their postal votes as to whether the club should incorporate or not. Unfortunately, this has obviously created problems for some of our Sub Groups. Some regular items are missing, and the diary has a little less detail than usual. Things should return to normal in the next issue, but, in the meantime, anyone wishing to obtain information on meeting topics, etc. should contact the Sub Group Secretaries, as shown on the Information Page.

This will be the last Editor's Page I write wearing the dual hats of President and Editor. Having to write on matters I felt it important to bring before the members has certainly helped to fill the Editor's Page, but it will be rather nice to go back to just chatting about the weather and birds, flowers, etc. However, this time there are several important matters to be communicated to you.

NOMINATIONS FOR OFFICE BEARERS AND COMMITTEE FOR 1984/1985

At the close of nominations at the August General Meeting, the following persons were nominated for the various positions.

President	Laurie Leeson
Senior Vice President	Rob Moors
Junior Vice President	John Lintner
Secretary	Rod Fyffe
Assistant Secretary	Lyn Hamilton
Treasurer	Helene Boon
Committee	Chris Bunn
	Win Demeo
	Bill Holsworth
	Glenise Moors
	Nan Spence
	Rob Watkins
Immediate Past President	Eric Wilkinson (ex-officio)

(There was only one nomination for each position.)

SUBSCRIPTIONS

In this issue of Whirrakee, members will find three insertions. The first is a reminder that subscriptions become due for renewal at the September General Meeting. For the first time for a few years, our financial year has ended with the club in a sound position with a surplus rather than a deficit, and the Committee has decided that subscription rates will remain unchanged, at $14 for a family membership, $10 for a single membership, and $6 for children, and for the concession rate for pensioners. Please assist us by making your payment promptly.

INCORPORATION

The second insertion is a statement on the reasons why the Committee is strongly recommending that the B.F.N.C. should become an Incorporated Association, under the Associations Incorporation Act, 1981.

Editor's Page cont. on Page 14

BANDICOOTS - UNCONFIRMED SIGHTINGS NEAR BENDIGO

W.N. Holsworth, Secretary
Mammal Survey Group

From time to time members of the Mammal Survey Group are told about some mammal that an observer could not identify. Sometimes the vague descriptions defy recognition. The more precise descriptions often lead to the suggestions of "sugar glider", "brush-tailed phascogale", "antechinus", etc. Two reports, a few days apart last summer, and a few kilometres apart, near Lake Eppalock, suggest there is a species of bandicoot living in the forests not many kilometres east of Bendigo. One of the sightings was by Cynthia Watkins, who is no stranger to the local mammals.

The reference books say there are no bandicoot species that presently have a range extending into the Bendigo area, although the Museum of Victoria has a specimen of Short-nosed Bandicoot (Isoodon obesulus) * from Heathcote. At the June meeting of the Mammal Survey Group, bandicoot biology was the major topic of discussion, and the following notes, summarising information on the three species of bandicoot still extant in Victoria, formed the basis of the discussion.

* If there are bandicoots in the Eppalock area, this is the species most likely to be present.

BANDICOOTS - FAMILY PERAMELIDAE

by Bill Holsworth

Bandicoots are small marsupials weighing less than 3 kg that mostly eat insects and worms but occasionally eat plants. They share with the herbivorous Phalangeroids (Koala, possums, kangaroos) the characteristic of having the second and third toes joined together (syndactylous toes). However, unlike the Phalangeroids, which have only two lower front teeth, bandicoots have six like the carnivorous Dasyuroids, (marsupial "mice", "cats", "wolf", "antoater", etc.).

TAXONOMY AND DISTRIBUTION

The name bandicoot is not aboriginal but refers to a large Indian rat. The Peramelidae are closely related to Family Thylacomyidae, the Bilbies of the Australian deserts. There are three genera found in Melanesia, and four genera in Australia. Of the four Australian genera, one, the pig-footed bandicoot Chaeropus eucadatus, is extinct and a second, the rufous spiny bandicoot Echymipera rufescens, is restricted to a small area of the Cape York peninsula in Australia, but is common in New Guinea.

The remaining two genera, Perameles and Isoodon, are represented by four and seven species respectively. In Victoria there are only three species. The Long-nosed bandicoot Perameles nasuta is found only in the eastern half of Victoria and the Eastern-barred bandicoot P.gunnii is found only on the western basalt plains. It is particularly common in the city of Hamilton, but absent or rare elsewhere. The Southern brown bandicoot or Short-nosed bandicoot Isoodon obesulus is found in the southern third of the state.

BANDICOOTS - FAMILY PERAMELIDAE continued

IDENTIFICATION

All bandicoots have long noses for their very well developed olfactory organ. The species of the genus Isoodon are known as the short-nosed bandicoots to indicate that their noses are relatively shorter than the long-nosed Perameles group. I. obesulus has a uniform dark grey or yellowish-brown stiff hair on its back and sides and a creamy-white belly. The ears are rounded. P. nasuta is drab greyish-brown above and creamy-white below including its feet. Juveniles and a few adults show a faint barred pattern on the back. The ears are longer and more pointed than I. obesulus. P. gunnii is yellowish-brown above and slaty-grey below. The tail is white and there are three or four obvious pale bars on the hindquarters. The ears are long and pointed.

HABITAT

Except for studies on P. gunnii in Hamilton there has been very little field research done on bandicoots in Victoria. In Tasmania P. gunnii and I. obesulus have been studied, and in N.S.W. and Queensland several species have been studied including P. nasuta. All three Victorian species seem to have similar habitat requirements.

All species make grass nests that are usually well hidden in tall vegetation. The nest has no visible entrance and when a bandicoot is disturbed in its nest it breaks out in any direction. Soil may be mixed with the grass or cover the nest. All Victorian species are known to use rabbit burrows when available.

P. gunnii originally lived in perennial tussock grasslands of Danthonia (wallaby grass), Themeda (kangaroo grass), Stipa, Poa, etc., and in savannah woodland of river red-gum, yellow box, swamp gum and she-oak with a tussock grass understory. On basalt outcrops they occured in tussock grass and bracken 0.5 to 1.0 m. tall.

In Hamilton bandicoots are common along the Grange Burn with its introduced pasture grasses, cypress and poplars. They also occur on the golf course, and in public parks, cemetery and private gardens. They prefer areas of grass over 0.5 m. with not more than 70% ground cover. In Tasmania they used open areas for foraging and dense areas for nest sites.

Observations of P. gunnii made when they were more widespread in Victoria suggest they lived and foraged along paddock fences, in plantations and in fenced off dam areas. The causes of their decline in abundance is due to their habitat being converted to pastures, cultivation, and grazing by domestic animals and rabbits. The fox is undoubtedly a most important predator since the animals are abundant in Tasmania where foxes are absent.

FOOD HABITS

Bandicoots are predominantly carnivorous but are reported to eat plant material, especially when insects are in short supply. They dig small conical holes with their forefeet to find the insect larvae that make up much of their diet. In Tasmania P. gunnii ate black crickets, moths, various pasture grubs (larva of beetles and moths), adult beetles and earthworms. In Victoria cockchafer grubs (Coleoptera: Scarabaeidae) are recorded as an important food source.

BANDICOOTS - FAMILY PERAMELIDAE continued

BEHAVIOUR

All bandicoots are nocturnal, although I. obesulus is occasionally seen active during the day. They are not gregarious and do not tolerate crowding. In an outdoor enclosure one male will dominate all other males and usually only one survives for more than a few weeks.

In Tasmania P. gunnii females had a home range of 1.0 to 4.0 ha.; one had a home range of 11.3 ha. The males had home ranges of over 40 ha. but among the individuals in an area considerable overlap occurred. I. obesulus males had a home range of 4 to 6.5 ha. The only female home range measured was 2.3 ha.. Other bandicoot species studied elsewhere show similar home range behaviour with male home ranges 2 - 5 ha., and 1 - 2 ha. for females. Usually an individual will have several nests within its home range.

REPRODUCTION

Bandicoot reproduction has three notable features:

(1) They have the shortest gestation time of any mammal (12.5 days)
(2) The placenta is very well developed (chorio-allantoic type).
(3) Young bandicoots are born at a more advanced stage than other marsupials.

The northern species of bandicoots breed in most months of the year. Further south, and in Tasmania the breeding season tends to be restricted to late winter and early spring (July-November). During the breeding season females may produce a litter of one to five young every 60 days. A captive P. gunnii female in Victoria produced six litters in one year. Survival of pouch young is very good, but once they leave the pouch mortality is high.

The pouch opens to the rear and has eight nipples. The young stay in the pouch for 50 days and are weaned at 60 days in time for the new litter.

Most bandicoot females are capable of breeding before they are four months old and weigh only 550 to 600 g. Males mature two months later . Although they have the potential for a very rapid increase in population no large or dense populations are recorded. In Tasmania P. gunnii has reached a density of 8.5 per ha.

Observation of captive animals revealed that mating occurs at night and birth 12.5 days later during the day. The young make their way to the pouch unaided and attach to a nipple that was not used by the previous litter.

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BANDICOOTS - FAMILY PERAMELIDAE continued

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WOOD WOOD W.V.F.N.C.A. MEETING, MID-AUGUST, 1984 by Tom Patullo

With fond memories of a weekend spent in the Wood Wood area some years ago, when we camped with the Mid-Murray Group at Annuello, we decided to attend the August meeting of the W.V.F.N.C.A., with the hope of renewing many valued friendships, and seeing again the wonderful floral display that was shown us on the earlier visit.

The friendship was certainly there but the floral display of former years was missing, as it was a little early. However, there was never a dull moment, as always, when people of kindred interests gather. As we mingled with follow naturalists from all corners of the western half of our state, there was some light hearted leg-pulling and baiting among good friends, and we all passed a pleasant, informative and busy weekend. Our party, all being retired, were able to travel leisurely on our outward journey on Friday, and became comfortably settled in our van. In the evening, we visited the Ipsens, who had travelled up earlier.

During an informal evening on Friday, we learned that the scheduled talk for Saturday night, "Kangaroo management policy and current research", had unavoidably been cancelled.

On Saturday, we made an early start at 9 a.m. for Lake Tyrrell with the bus and a full complement of forty-five, and some overflow. Lake Tyrrell is a large salt lake some twenty miles long, with ancient lunettes or sand dunes running in a north and south direction on the eastern side.

On a landscape, sparsely populated by trees and understory, a low scrubby tree, known locally as Cattle-bush, appeared to be the most frequent botanical species. There were some Mallees, Weeping Pittosporums and Casuarinas interspersed in the sparsely covered area.

For the understory, there was a rather lush green plant called Twinleaf, evidently because the leaves are carried in pairs. It has a yellow flower about the size of a five cent piece. Here and there, we found a succulent, one of the Salt-bushes, I think, called Blue-bush while the numerous dead Roly-Polys travelled hither and thither, at the whim of the wind, over an otherwise almost bare landscape.

WOOD WOOD W.V.F.N.C.A. MEETING (Contd)

Along the roadside, we found an interesting specimen, a leafless plant somewhat resembling the Leafless Currant Bush of the Whipstick, but not reaching anywhere near the same size. It had small green berries along the leafless branches. We were told it was a species of Exocarpos that would put it in the same genus as our Wild Cherry.

A number of birds were sighted in this area. The ones which caught my interest were a pair of Grey Falcons nesting some fifteen up in a Mallee and a pair of Red-capped Robins. The Singing Honeyeater was calling, and a tribe of Purple-backed Wrens were seen.

We travelled per bus and car back to Eureka Forest Reserve, and an excellent barbeque lunch put on by the Mid-Murray Group. As we pulled into the watering hole, we were struck by a beautiful [illegible] specimen of Acacia ligulata, or small Cooba. Don't be fooled by the word "small" in the common name, as it was a beautiful specimen in full bloom, and I mean full. It was completely covered with large orange-yellow flowers, from the topmost twig to ground level. It must have been nearly ten feet high, and a good twenty foot wide - a magnificent shrub! An observation I made during the weekend was that all the sand dune wattles bear their florescense right to the ground.

In a short talk after lunch, Neil McFarlane told us that we were standing on an ancient Lunette, probably 20,000 years old. The size and age of the trees were quite evident. We wandered off among the Giant Casuarinas, Weeping Pittosporums, Hakeas etc., in wonderful habitat area. The mature trees contained many nesting hollows and a number showed recent evidence of biting and chewing around the edges, signs that the breeding season of the Parrots and Galahs was approaching.

There was abundant evidence that the plants of the Reserve were reproducing well, and many young trees of all kinds were seen. A number of Quandongs were found during the walk, also a Pimelea species, a tall shrub known as the Bootlace Bush. An unusual specimen was the Jasmine linearis, a tri-foliate shrub. The leaves had an unusual form with the main leaf for the centre, then a smaller leaf on each side of the lower end of the long centre, as if added as an afterthought.

On Sunday, we travelled north to Wandown State Fauna Reserve and had a very interesting day among the wattles, mallees and sand dunes of the reserve, which consists of some thousand acres of virgin Mallee country. This Reserve was created mainly due to the efforts of our Mid-Murray friends for the preservation of natural habitat for the Mallee Fowl which still exist in the area. Actually, the main attraction of the day was a hike to an active Mallee Fowl's Mound.

During this three mile walk, we were introduced to a number of very attractive Wattles which thrive among the sand dunes. We also found an unusual Grevillea and, as we walked, we discussed the Mallees, all of which were different to our Whipstick varieties.

On arrival at the mound, we gathered around and listened to an explanation of the birds' activity, at the nest. Being an active mound, we could see how the bird had hollowed out the centre of the

WOOD WOOD W.V.F.N.C.A. MEETING (Contd)

mound, and had heaped up a large quantity of bush litter in the centre crater. Our guide explained how the bird would sweep the litter from the forest floor all around the mound, by brushing with his wings, into windrows radiating from the mound. He would then brush the windrows into the centre hole in the mound. The mound is then left open until this heap of bush litter has become sufficiently damp from the rain. The mound is then closed by pushing the high sides of the mound over the litter. This causes the litter to set up fermentation which raises the temperature of the mound, until it obtains the correct heat required.for incubation. It is then that the male allows the female into the mound to begin egg laying.

After a barbecue lunch, we strolled off towards an area of sand dunes covered mostly by mallees, and with Cliff Beauglehole in tow, we spent an informative couple of hours collecting specimens and becoming conversant with the six different Mallees growing in the area.

So we said goodbye to Wood Wood, with the thought "The Mid-Murray barbies are really something".

The following is not a complete list but, rather, are the botanical speciments which caught my interest.

WATTLES FROM WANDOWN FAUNA RESERVE

Acacia wilhelmiana	Dwarf Nealie
Acacia rigens	Nealie
Acacia ligulata	Small Cooba
Acacia hakeoides	Hakea Wattle
Acacia schlerophylla	Hard Leaf Wattle
Acacia montana	Mallee Wattle
Acacia brachybotrya	Grey Mulga

MALLEES

442.	Eucalyptus faecunda	578.	Eucalyptus oleosa
I41	Eucalyptus Dumosa	573	Eucalyptus socialis
I36	Eucalyptus incrassata	564	Eucalyptus gracilis

(The numbers refer to illustrations in G.M. Chippendale's "Eucalyptus Buds and Fruits".)

OTHER SPECIMENS COLLECTED WERE

Grevillea huegelii	Jasmine linearis
Exocarpos aphyllas	Pimelea sp.
Cassia species (4 different forms)	Turpentine Bush

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SECOND CENSUS OF THE PLANTS OF MT. KORONG

by Bob Allen

On a Club trip to Mt. Korong on 18.9.83, the opportunity was taken to make a census of the plants of the area. The total for the day was an amazing 129 species. A further 24 plants were added to the list from observations made previously by Cliff Beauglehole, Don Franklin, and Eric Wilkinson. This brought the grand total of plants for the area to 153 species in 54 families. (See account and list in "Whirrakee" Vol.4 No.10. pages 7-12). The weather was cool with the whole countryside a lovely green on the September trip, with an odd splash of rain.

I revisited the area again on 21.11.83 in the hope of adding a few more plants to the list, and found conditions completely changed. The grass had dried out, necessitating many stops to extract grass seeds. The heat was stifling, and smoke from many fires smarted my eyes. I had selected the day that the C.F.A. men had picked to spot burn the area, to save a complete wipe out should a fire start during the oncoming summer months. However, despite these drawbacks, I had a very enjoyable day, adding a further 50 plants to the list, several being entirely new to me.

This brought the total for the two surveys to 203 species in 60 families. My next visit will be in the early spring, and it should add further plants to the list. Some of the highlights on this last trip were a mass showing of Pincushions - Brunonia, and Bluebells - Wahlenbergia, mixed together making an unforgetable sight; a large group of budgerigars that had to split up on each side of me as they flashed past, and best of all, the many soaks that held - not only the new plants - but masses of Fairie's Aprons - Utricularia - in full flower.

In the following list, an asterisk (*) indicates an introduced species, and the symbol # indicates a species recorded on the Calder Highway at Glenalbya, south of Mt. Korong, but not yet located within the Mt. Korong Scenic Reserve.

ANGIOSPERMAE
(Flowering Plants)

MONOCOTYLEDONEAE

GRAMINEAE

TRIBE AGROSTIDEAE

* Polypogon monspeliensis	Annual Beard Grass
* Phalaris tuberosa	Toowoomba Canary Grass

TRIBE FESTUCEAE

* Desmazeria acutiflora	Desmazeria #
* Vulpia myuros	Rat's Tail Fescue

TRIBE DANTHONIEAE

Danthonia semiannularis	Wallaby Grass

TRIBE STIPEAE

Stipa elegantissima	Feather Spear Grass #
Stipa blackii	Crested Spear Grass
Stipa variabilis	Variable Spear Grass

TRIBE PANICEAE

Panicum prolutum	Rigid Panic Grass

TRIBE MONERMA

* Monerma cylindrica	Common Barb Grass #

SECOND CENSUS OF THE PLANTS OF MT. KORONG continued

CENTROLEPIDACEAE

Centrolepis aristata	Pointed Centrolepis
Aphelia gracilis	Slender aphelia

JUNCACEAE

Juncus holoschoenus	Joint Leaf Rush

LILIACEAE

TRIBE ANTHERICEAE

Tricoryne elatior	Yellow Rush Lily
Arthropodium milleflorum	Pale Vanilla Lily

IRIDACEAE

* Gynandriris setifolia	Thread Iris

ORCHIDACEAE

Microtis unifolia	Common Onion Orchid

ANGIOSPERMAE
(Flowering Plants)

DICOTYLEDONEAE

CHENOPODIACEAE

Enchylaena tomentosa	Barrier Salt-Bush

LORANTHACEAE

Amyema miquelii	Box Mistletoe #

AMARANTHACEAE

Alternanthera denticulata	Lesser Joyweed
Ptilotus erubescens	Hairy Tails

CARYOPHYLLACEAE

Polycarpon tetraphyllum	Four-leaved Allseed

RANUNCULACEAE

Clematis microphylla	Small leaved Clematis #

LAURACEAE

Cassytha melantha	Coarse Dodder-laurel #

CRUCIFERAE

TRIBE BRASSICEAE

* Sinapis arvensis	Charlock

CRASSULACEAE

Crassula colorata Var. Tuberculata	Dense Crassula

PAPILIONACEAE

Daviesia genistifolia	Broom Bitter-pea #
Trifolium scabrum	Rough Clover
Eutaxia microphylla	Eutaxia #

GERANIACEAE

Pelargonium rodneyanum	Magenta Storks-bill

COMPOSITAE

TRIBE ASTEREAE

Brachycome leptocarpa	Daisy

TRIBE INULEAE

Helichrysum bilobum	Rough Everlasting #
Gnaphalium candidissimum	White Cudweed
Gnaphalium involucratum	Star Cudweed

BOTANY GROUP MEETING

Friday, 27th July, '984

The main topic for the night was the Rutaceae family. The commonest member of this family in the Bendigo area is Eriostemon verrucosus, the Fairy Waxflower or as we may prefer to call it after its (former) abundance, the Bendigo Waxflower. This flower shows the typically waxy looking petals of the family, in this case five of them in a brilliant white star. Occasionally nature multiplies the number of petals (and of other flower parts) to produce 'Double' varieties much sought after for cultivation. A colour photograph and a garden grown cutting of the Double Waxflower showed why this form is much prized.

Closely related but quite rare in the area is the Prickly Waxflower, Eriostemon pungens. The common and specific names refer to the sharp pointed leaves that distinguish this waxflower. It is a plant normally associated with the Little Desert and westwards from there.

Another showy member of the family that is largely restricted to this area is Phebalium obcordatum (Dainty Phebalium). The yellow antlers held high above the five white petals give a twinkly star effect to the flower. The beauty had to be admired via one of Reg Smart's tremendous close-up photographs as the flowers do not appear until well into the spring.

Also growing in defined patches, but more widespread in the area, is Boronia anemonifolia,(Sticky Boronia). Again, this is normally a spring flowering plant, but some flowers are now beginning to appear. Boronias differ from most other Rutaceae in having only four petals, and have opposite (paired) leaves.

Correas also have four petals, but these are joined to a greater or lesser extent into a cylindrical tube. Our common representative, and in fact common in most of Victoria, is Correa reflexa. This is a very variable plant with, it seems, a variation of colour or habit for every region in which it is found. A green form predominates near Bendigo, but there are (or were) red flowered plants in the Whipstick. Otherwise the nearest red flowers to Bendigo are at Kingower.

A rarer Correa seems to limit itself to granite areas like Mt. Korong. It is logically called the Granite Correa, although the specific name C. glabra means hairless.

There is one other member of the Rutaceae found in our area, and that is Crowea exalata. Whereas the waxflower and Phebalium produce dazzling white masses in spring, Crowea prefers to show a few pink or red beauties for most months of the year.

Also displayed were specimens of other Boronias and Correas that originated from other areas of Victoria, or like the common garden grown Brown Boronia from interstate. Phebalium lamprophyllum represented the more typical yellow flowered species of its genus.

One group of the Rutaceae have great economic significance by bearing the edible citrus fruits i.e. Oranges, Lemons and their allies. Australia is represented but poorly in this group, with just the Desert Lime (Eremocitrus glauca) of inland areas.

BOTANY GROUP MEETING (Contd)

Editor's Note: Anyone wishing to learn more about the family Rutaceae in this area should refer to "Rutaceae of the Bendigo Region" by Peter Ellis. Part I appeared in Whirrakee Vol. I (8), pp 3 - 6 and Part 2 in Vol. I (9), pp I0-II. See also additional notes by Margaret Watts on p.I3 of Whirrakee Vol. I (I0)

BOTANY GROUP EXCURSION

Saturday, 28th July, I984

The Victorian weather forecast was for rain and the unfortunate majority thought it would be true for Bendigo. In actuality we had only light showers during the afternoon. Optimism bore fruit for the five who did go to the Crosbie Forest.

The southern section is on granite, leading to the much lighter sandy soil around the edge. Sand lovers like the Running Postman (Kenned a prostrata) were found. Higher up the hill the solid rock gets closer to the surface and one would expect a diminishing of the moisture loving plants, however plants like the Rock Fern tended to cover the surface rather than be tucked under rock outcrops.

Since Reg Smart had had his Fungi Foray 'dried out' in June, he was delighted to find several good specimens, including a relatively large patch of Bird's Nest Fungus.

The effects of the drought were readily apparent where the Red Stringybark gave way to White Box nearer the top of the hill. Almost every White Box tree was just dead timber above a few feet up. Eucalypt stamina however showed with the strong regeneration at their bases and plentiful seedlings coming through.

Then in the centre of the block was an incredible sight. An extensive heathy area all white with Cryptandra tomentosa still in full flower. In full support was Urn Heath with larger than usual flowers. Ready to take over was Leucopogon virgatus (Common Beard-heath), and several other heathy shrubs. Grevillea alpina (Mountain Grevillea) was represented by numerous small new plants, obviously all seedlings starting after the latest rains. Apparently the drought had made a clean sweep of the adult plants.

For those who visited this area over the June long weekend, the heathy area covers a much wider extent than their brief encounter suggested. If a winter visit could elicit such excitement, a spring visit is a must.

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THE LONG-FOOTED POTOROO

Contributed by Rod Fyffe

This is yet another story of how a new species has been recently discovered. First encountered in I967, it was not until I980 that biologists discovered that in fact it was a new species of potoroo. Unfortunately, it has only a very limited geographic range, and its known habitat is not included in a national park. In fact, the area where it is found in East Gippsland has been zoned for hardwood production.

(From the World Wildlife Fund Newsletter)

FUSCOUS HONEYEATER - Lichenostomus Fuscous

B.F.N.C. Bird Observers Group 'Bird of the Night' Discussion, June, 1984.

Calls: The main call is loud, clear, distinctive and is often made throughout the day, while the birds are feeding and in all seasons of the year. The alarm call is a rapidly repeated single note. In the early morning, and during soaring flight, the call consists of two notes repeated alternately several times. Occasionally, the birds have been observed to mimic.

Appearance: They are similar in size to the majority of honeyeaters i.e. about 150 to 160 mm long. General plumage is dull brown tinged with olive-green above and pale grey underneath. A small light yellowish-white plume occurs on each side of the neck, but is not always easily seen. Both sexes are similar. Non-breeding adult birds may be seen with a yellow base to the bill. Immatures have a brownish bill, while breeding adults have black bills.

Habitat: In Bendigo district, the birds occur throughout most of the various forest areas.

Food: This consists of insects and nectar. They sometimes feed on the ground and in bushes low to the ground, but are more often seen higher among tree blossoms.

Breeding: Generally takes place between August and December in the Bendigo district. In suitable seasons, more than one brood may be raised. The nest consists of an open cup of strips of bark and grass, bound with cobwebs, lined with fur, down or hair and fixed to a thin, horizontal spray at heights in Bendigo forests generally from a couple of feet to sometimes 30 or 40 feet above ground. There may be two or three eggs, yellowing to salmon in colour, lightly spotted. No information is available on either incubation nor fledgling periods. Nests are frail and some become badly wind damaged.before the young are fledged.

Habits: Fuscous honeyeaters are usually found in small parties, but numerous groups may be found foraging together where heavy flowering of Eucalypts occurs. Like White-plumed and Yellow-plumed honeaters, they have a soaring flight display, each species calling with a distinctive song during the flight.

General: The species if one of the most common honeyeaters in the Bendigo district. Nesting sometimes occurs in Autumn when conditions are suitable. They are often found on the Big Hill Range and elsewhere, feeding on insects and nectar in flowering Grevillea species. The birds appear to be more numerous where Eucalypts are in flower, which indicates that some local movement occurs with variation in food supply. Local bird-banding observers with considerable experience have observed that Whipstick forest Fuscous honeyeaters are smaller, and mostly with partly or wholly yellow and orange bills and olive-green plumage on the back. In contrast, birds in the Big Hill Range are larger, mostly with black bills and greyish on the back.

FUSCOUS HONEYEATER (Contd)

It is claimed that they occur in social groups more than other honeyeaters.

Like most honeyeaters, fighting, squabbling and chasing, appears to be a feature of the feeding process, probably as a consequence of competition for the same food of insects and nectar.

Compiled by Bill Flentje

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Editor's Page, (continued)

Incorporation was an option open to voluntary clubs in the past, but it was legally complex and very expensive. The 1981 Act has made it possible for organisations such as ours to become legally incorporated following a standardised procedure, for a set registration fee of $60, and an annual fee of $20. As members will have become aware, incorporation also requires acceptance by the Registrar of a set of Rules (= Constitution) of the Association, including certain provisions required by the Act.

The Committee set up an Incorporation Sub-Committee, which firstly examined the whole issue of Incorporation, and recommended to the full Committee that the B.F.N.C. should incorporate. After due consideration, this recommendation was endorsed and the issues were then raised at the following General Meeting. Although the response was not unanimously in favour, there was sufficient support expressed to warrant taking the matter further, and the Sub-Committee was asked to look into preparing a revised set of Rules, and Statement of Purposes, as required by the Act. Their draft Rules and Statement of Purposes were then examined and refined at a series of Committee Meetings, including special ones convened for the purpose in July, and the resulting draft Rules were tabled for comment at the August General Meeting. As was stated last month, these rules are closely based on the present B.F.N.C. Constitution, and retain most of its provisions in only slightly modified form, except for additional items required by the Act. Rather disappointingly, only one member handed written comments to the Committee, but these were well considered and constructive comments, which drew our attention to several matters needing attending. We hope that the final version is now clear and concise in its wording. However, it is apparently not unusual for the Registrar to require some changes also, so we cannot yet claim we have the final version. (The B.F.N.C. would continue to operate under the present Constitution until Registration of Incorporation is completed.)

POSTAL BALLOT

The third insertion is a postal ballot form (or forms for adult family members) for voting on the Incorporation issue. Please act on this. We have 199 financial members aged over 18 and therefore entitled to vote, and since only about a quarter of this number attend meetings regularly, we need a high percentage of non-attending members to record their votes on this issue, principally because, as I pointed out last month, the Act requires approval by more than 50% of the total membership. Please read the statement and voting instructions carefully, and then record your vote. Remember that husband and wife in family memberships are both entitled to vote.

Editor's "Page" cont. on Page 15

A FINAL PRESIDENTIAL COMMENT

To conclude this last President/Editor's Page, I would like to thank members of the Committee for their support during my two years as President. It is a period which has seen the club successfully venture into publishing its first book "The Eucalypts of the Bendigo District". I am pleased to be able to report that we have already sold enough to recover the publication cost, and we can take some pride in having achieved a worthwhile result without any Government subsidy, or any other outside help. I hope the confidence gained will lend to further publication ventures. We have also seen the Club move into a much sounder financial position and it was a real pleasure for the Committee to be in a position to decide no increase in subscriptions was needed this year. I sincerely hope that the motion to incorporate is carried, because it opens up exciting possibilities for the future, including being able to negotiate purchase of land of conservation value, and to be in a position to receive bequests or other sources of income to help make such action possible. Finally, I urge your support for President Elect, Laurie Leeson, and the other office bearers and committee members for 1984/1985

Eric Wilkinson, President and Editor

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LABORATORY GROWN ORCHIDS

A recent issue of the World Wildlife Fund Newsletter announced that new breeding techniques have made it possible to re-introduce six species of endangered Australian orchids to nature reserves.

The new technique has enabled the re-introduction of the purple double-tailed orchid back into reserves. This orchid had been reduced to one site of fifty plants growing alongside a railway line in a Melbourne suburb.

Re-introduction began in 1982 and it is very pleasing to note that some of these seedlings flowered last year.

Contributed by Rod Fyffe

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THE LONG-FOOTED POTOROO

This is yet another story of how a new species has been recently discovered. First encountered in 1967, it was not until 1980 that biologists discovered that in fact it was a new species of potoroo. Unfortunately it has only a very limited geographic range, and its known habitat is not included in a national park. In fact, the area where it is found in East Gippsland has been zoned for hardwood production..

(From the World Wildlife Fund Newsletter.)

Contributed by Rod Fyffe

NOTES FROM COMMITTEE MEETING: AUGUST 14

1. The Creeping Boobiola Whipstick form was re-introduced into the Whipstick on 12 August. Thirteen plants were planted on two sites.

2. Cliff Beuglehole's nomination for the B.H.P. Persuit of Excellence was discussed at the W.V.F.N.C. meeting on August 10-12. It was agreed that a letter of support should come from W.V.F.N.C. in support of his nomination. In addition Cliff Beuglehole may get another 3 yr. contract from the Ministry of Conservation, and publication funding from Western Mining Corp.

3. W.V.F.N.C. is not going to incorporate.

4. Subscriptions are to remain the same as last year.

5. Committee has taken note of members views with regard to the publishing of the minutes in Whirrakee. The minutes will not be published.

6. Comments on the proposed incorporation were received and noted, and where possible, used.

REASONS WHY THE BENDIGO F.N.C. SHOULD BECOME INCORPORATED

Incorporation will separate the Club from the members as legal entities. This means that an incorporated Club may do several things that the present Club cannot do. For example, buy and sell property, accept bequests, borrow money and invest funds in a wider range of investment than bank accounts. Incorporation also means that the Club can sue and be sued, but the officers and members of the club are protected. Legal liability will be limited to the assets of the Club and members personal property will no lor er be at risk. The cost of incorporating will be $60 for registration and $20 for the annual fee.

The Associations Incorporation Act 1981 has been created for the benefit of clubs such as the Bendigo F.N.C. and the Committee considers it very desirable that we should become incorporated. The Committee urges you to either come to the September General Meeting on Sept. 12, 1984, or send in the pink postal ballot form before Sept. 12. Family memberships will require separate votes from the husband and wife.

BENDIGO FIELD NATURALISTS CLUB

Address for correspondence, P.O. Box 396, Bendigo 3550.

Office bearers for 1983-1984

PRESIDENT	Eric Wilkinson	7 Weatherall St.Cal.Gully	46 8736
SENIOR VICE PRESIDENT	Rob Moors	Sedgwick	39 6254
JUNIOR VICE PRESIDENT	John Lindner	Burns St., Axedale	39 7308
SECRETARY	Laurie Leeson	76 Lawson St. Spring Gully	43 0521
ASSISTANT SECRETARY	Rod Fyffe	546 Hargreaves St., Bendigo	43 7673
TREASURER	Helene Boon	Kamarooka	36 9252
MEMBERSHIP OFFICER	Win Demeo	Kamarooka	36 9226
EXCURSION ORGANISER	John Lindner	Burns St., Axedale	39 7308
LIBRARIAN	Glenise Moors	Sedgwick	39 6254
EDITOR	Eric Wilkinson	7 Weatherall St.,Cal.Gully	46 8736
ASSISTANT EDITOR	Victoria Fyffe	546 Hargreaves St.,Bendigo	43 7673

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Membership of the Bendigo Field Naturalists Club is open to all those interested in natural history. The membership subscription rates are Single $10.00, Family $14.00, Pensioner and children $6.00. Whirrakee subscription only, $10.00.

General Meetings are held on the second Wednesday of each month at the Conference Rooms, Department of Agriculture, Midland Highway, Epsom. Meetings start at 7.30 pm., and conclude with supper. The Annual Meeting is held in September.

Excursions The assembly point for excursions is outside the Special Services Complex in Havlin St. East, Bendigo, unless otherwise specified. Full day excursions normally commence at 10.00 a.m. (usually on a Sunday). Half day excursions normally commence at 2.00 p.m. and may be either a Saturday or Sunday. Day or half day excursions are usually held on the weekend following the General Meeting. Campouts are held several times in a year, usually coinciding with long weekends or holiday periods.

The B.F.N.C. has four sub-groups :-

The BIRD OBSERVERS GROUP meets on the first Friday of the month at the Agriculture Department, Epsom, at 7.30 p.m.
President: John Berry 22 Barrell St., Eaglehawk 46 9921
Secretary: Harvey Rich 58 Dundas Rd., Maryborough 61 1698

The BOTANY GROUP meets on the fourth Friday of the month at 7.30 p.m. at the Biology Lab., Applied Science 1 Building, B.C.A.E., (unless otherwise announced).
Convenor: Eric Whiting, 7 Aviary Crt., Kennington 43 5965

The CONSERVATION GROUP meets on the third Tuesday of each month, at 8.00 p.m. in member's homes as announced in the monthly diary.
President: Chris Bunn, Averys Rd., Eaglehawk 46 8141
Secretary: Don Franklin, C/o Ascot Lodge Caravan Park, Epsom.

The MAMMAL SURVEY GROUP meets on the third Thursday of the month, at 8.00 p.m. in member's homes as announced in the monthly diary.
President: Graham Hill, 31 Curnow St., Golden Square 42 4016
Secretary: Bill Holsworth, Nabilla Cr., Kennington 43 4063

MR &MRS R B ALLEN
20 HOUSTON ST.
BENDIGO
3550

- DIARY -

MEETINGS

Sept.12 — ANNUAL GENERAL MEETING
Presidential Address: Eric Wilkinson will give a talk on "The Granite Hills of North Central Victoria", mainly on geological and geomorphological aspects, but with some reference to their distinctive botanical associations, and relation of this to the geology.

Oct. 10 — BOTANY WORKSHOP, to be organised by Botany Group.

Nov.14 — Lecturettes by members on insects - details to be announced. Visit by Bob Finlay of Possum Books, with his extensive range of natural history books at discount prices - in time for Christmas this time, rather than after.

EXCURSIONS

Sun.Sept.16 — KAMAROOKA REFERENCE AREA
Leaders: Jack Kellam and Jack Ipsen
Meet at Havlin St. at 10.00 a.m.

W/E Sept. 22-23 — MOUNT KORONG CAMPOUT
Leader: Eric Wilkinson (46 8736)
The main purpose of this campout will be further botanical exploration as a follow up to the flora survey commenced last year. This time we will be concentrating on the northern spurs of Mt.Korong, and the valley between them - a most attractive area in spring. The campsite is the Lands Dept. picnic area at the foot of Mt.Korong, just off the Wedderburn Serpentine Road. BYO drinking water.

Sun.Sept.30 — JACKASS FLAT - WORKING BEE/EXCURSION
10.00 a.m. - 4.00 p.m. (approx.) - meet at Crane St. gate. Come equipped for removal of broken glass, rusty tins, etc. and also for botanising in this most interesting Flora Reserve.

Sun.Oct.14 — KIMBOLTON EDUCATION AREA
Leaders: Jack Kellam and Jack Ipsen
Meet at Havlin St. at 10.00 a.m.

W/E Oct. 27-28 — KERANG - Bird Observers Group Campout

BIRD OBSERVERS GROUP

Fri. Sept.7 — 7.30 p.m. Dept. of Agriculture, Epsom. Annual General Meeting.
Sat. Sept.8 — Half day outing starting at 9.00 a.m. from Education Dept., Havlin St.

CONSERVATION GROUP

Tues. Sept.18 — Please check with Chris Burn, 46 8]4], for details of venue.

MAMMAL SURVEY GROUP

Thurs. Sept.20 — 8.00 p.m. at Glenise and Rob Moors' home, Sedgwick.

BOTANY GROUP

Fri. Sept.28 — 7.30 p.m. Biology Lab., B.C.A.E., Edwards Rd. campus.

COMMITTEE MEETING

Wed. Sept.26 — 8.00 p.m. Glenise and Rob Moors' home, Sedgwick.